

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A component transfer device, comprising:
a roller device adapted for moving a liner having a plurality of components removably adhered thereto;
a gripper adapted for selectively gripping the liner; and
a placement actuator adapted for engaging a desired component of the plurality of components, the placement actuator further adapted for placing the desired component on a target device;
wherein the gripper and placement actuator are removably coupled with a coupler, the coupler adapted for moving the placement actuator when the roller device moves the liner.
2. (Original) The component transfer device as in claim 1 wherein the gripper and placement actuator move about a same linear distance when the roller device moves the liner.
3. (Original) The component transfer device as in claim 1 further comprising a base against which the liner is gripped by the gripper, the base comprising a peel edge over which the liner is moved.
4. (Original) The component transfer device as in claim 3 wherein the peel edge is a fixed peel edge.
5. (Original) The component transfer device as in claim 3 wherein the roller device comprises a pinch roller, and wherein the base is disposed between the pinch roller and the gripper.

6. (Original) The component transfer device as in claim 1 further comprising a tension device adapted to provide a back pressure generally resistive to the roller device moving the liner.

7. (Original) The component transfer device as in claim 1 wherein the placement actuator comprises a vacuum head for engaging the desired component.

8. (Original) The component transfer device as in claim 7 wherein the vacuum head comprises a hole pattern having a same general shape as the desired component.

9. (Original) The component transfer device as in claim 1 further comprising a sensor adapted for sensing a position of the desired component on the liner.

10. (Original) The component transfer device as in claim 9 wherein the sensor is further adapted for sensing a position on the liner of a next component to be transferred.

11. (Original) The component transfer device as in claim 9 further comprising a gas jet adapted for directing a gas towards the liner to bias the liner towards a base when the sensor is sensing the position of the desired component.

12. (Original) The component transfer device as in claim 1 wherein the liner comprises a release liner for removably adhering the plurality of components thereto.

13. (Original) The component transfer device as in claim 1 wherein at least some of the plurality of components are adhesive components removably adhered to the liner.

14. (Original) The component transfer device as in claim 1 wherein the placement actuator is adapted to engage the desired component while the desired component is adhered to the liner.

15. (Original) The component transfer device as in claim 1 wherein the actuator is adapted to retain the desired component when the liner is moved over a peel edge.

16. (Original) The component transfer device as in claim 1 wherein the actuator is adapted to rotate the desired component before placing the desired component on the target device.

17. (Original) The component transfer device as in claim 1 further comprising a print head adapted to print on the desired component when the desired component is on the liner.

18. (Original) The component transfer device as in claim 1 further comprising a controller coupled to the roller device for controlling the liner movement.

19. (Original) The component transfer device as in claim 18 wherein the controller is further coupled to the gripper.

20. (Original) The component transfer device as in claim 1 further comprising a stroke actuator coupled to the placement actuator and adapted for positioning the placement actuator relative to the target device.

21. (Original) The component transfer device as in claim 1 wherein the gripper and placement actuator are fixedly coupled together.

22. (Original) The component transfer device as in claim 1 further comprising at least one stop, the stop positioned to engage the placement actuator at a desired location relative to the target device.

23. (Original) A component transfer device comprising:
means for moving a liner over a peel edge, the liner having a plurality of components removably adhered thereto;
a placement device adapted for engaging a first component of the plurality of components while the first component is adhered to the liner at a first location; and
a gripper adapted for gripping the liner at a second location;

wherein the gripper and placement device are adapted for moving about a same linear distance when the liner is moved.

24. (Original) The component transfer device as in claim 23 wherein the placement device is adapted to retain the first component when the first location passes over the peel edge separating the first component from the liner, the retained first component having a same general shape both before and after removal from the liner.

25. (Original) The component transfer device as in claim 23 further comprising a sensor adapted to sense a position of a second component on the liner.

26. (Original) The component transfer device as in claim 23 wherein the placement device is further adapted to place the first component on a target.

27. (Original) A method of transferring components from a liner to a desired target, the method comprising:

positioning the liner at a desired position;

engaging the liner with a gripper and with a placement actuator, the placement actuator engaging a desired component that is removably adhered to a first portion of the liner;

moving the liner so the first portion passes over a peel edge, wherein the gripper and the placement actuator move with the liner;

retaining the desired component with the placement actuator and removing the desired component from the liner when the first portion passes over the peel edge;

providing relative movement between the placement actuator retaining the desired component and the desired target, to couple the desired component and the desired target.

28. (Original) The method as in claim 27 wherein the desired component remains substantially free of deformations when retained by the placement actuator compared to the desired component shape when adhered to the liner.

29. (Original) The method as in claim 27 wherein retaining the desired component with the placement actuator comprises applying a negative pressure to the desired component using a plurality of vacuum holes in the placement actuator.

30. (Original) The method as in claim 27 wherein providing the relative movement comprises a movement of the placement actuator.

31. (Original) The method as in claim 27 wherein providing the relative movement comprises a movement of the target device.

32. (Original) The method as in claim 27 further comprising sensing a location of the desired component on the liner before engaging the desired component with the placement actuator.

33. (Original) The method as in claim 32 further comprising directing a gas towards the liner to help hold the liner first portion substantially flat relative to the sensor when sensing the location of the desired component.

34. (Original) The method as in claim 27 further comprising controlling a second movement of the placement actuator to align the retained desired component and the desired target.

35. (Original) The method as in claim 27 further comprising retaining a second desired target with the placement actuator, and coupling the second desired target to the desired component while the desired component is adhered to the liner.

36. (Original) The method as in 35 further comprising coupling the desired component to the desired target after coupling the second desired target to the desired component.

37. (Original) The method as in claim 27 further comprising printing on the desired component while the desired component is adhered to the liner.

38. (Original) The method as in claim 27 wherein the gripper and the placement actuator move about a same linear distance when the liner is moved.

39. (New) The component transfer device as in claim 1 further comprising a controller coupled with the gripper and the placement actuator, the controller configured to move the gripper and the placement actuator a linear distance in response to movement of the liner.

40. (New) The component transfer device as in claim 23 further comprising a controller coupled with the gripper and the placement actuator, the controller configured to move the gripper and the placement actuator a linear distance in response to movement of the liner.

41. (New) The method as in claim 27 wherein the gripper and the placement actuator move a linear distance in response to movement of the liner.